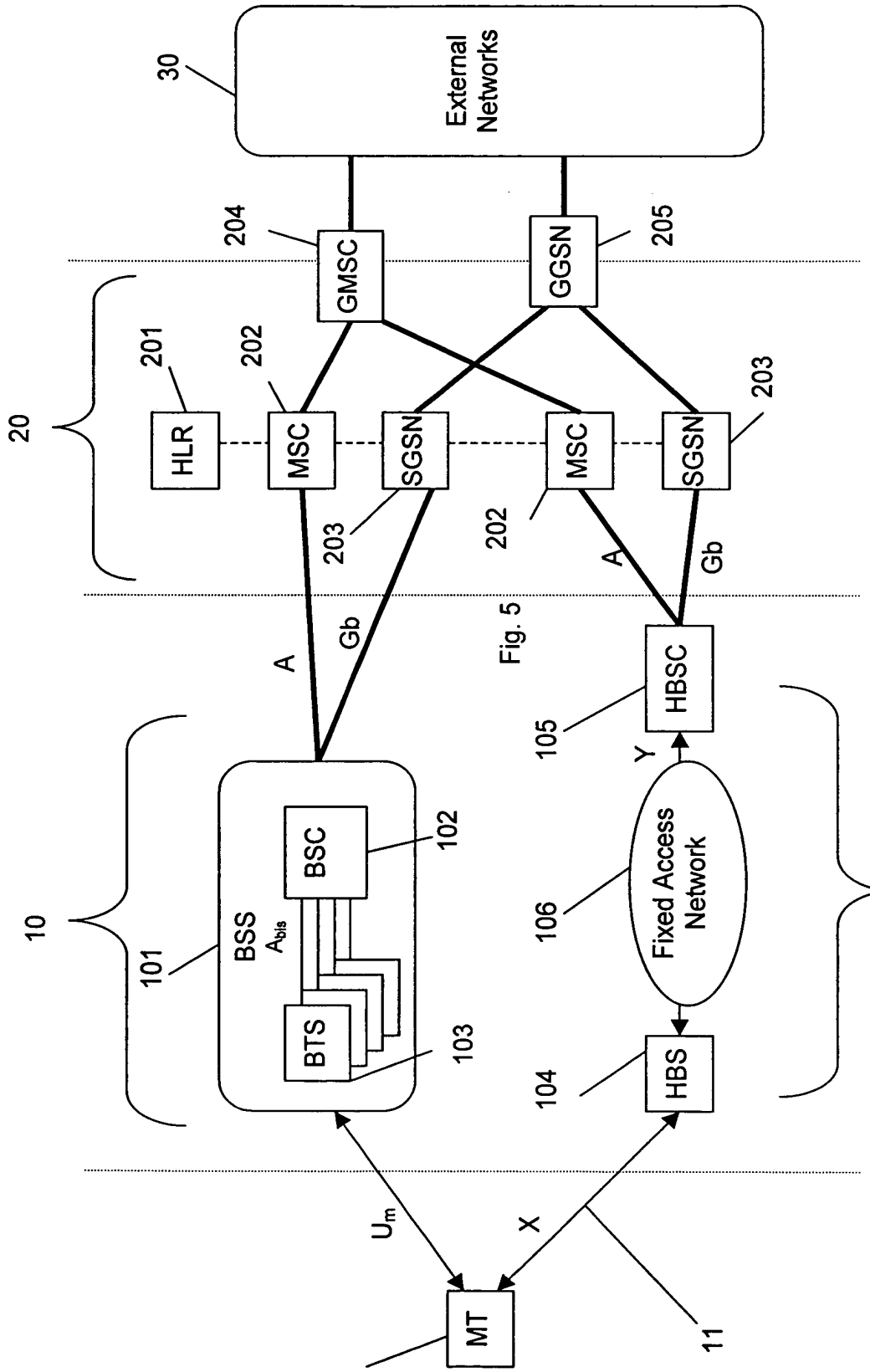
30
External Networks
204
GMSC
205
GGSN
20
201
HLR
202
MSC
SGSN
203
MSC
SGSN
203
202
A
Gb
A
Gb
10
101
BSS
Abis
BSC
102
BTS
103
105
HBSC
Y
106
Fixed Access Network
104
HBS
10'
Um
X
1
MT
11

Fig. 5

Fig. 1

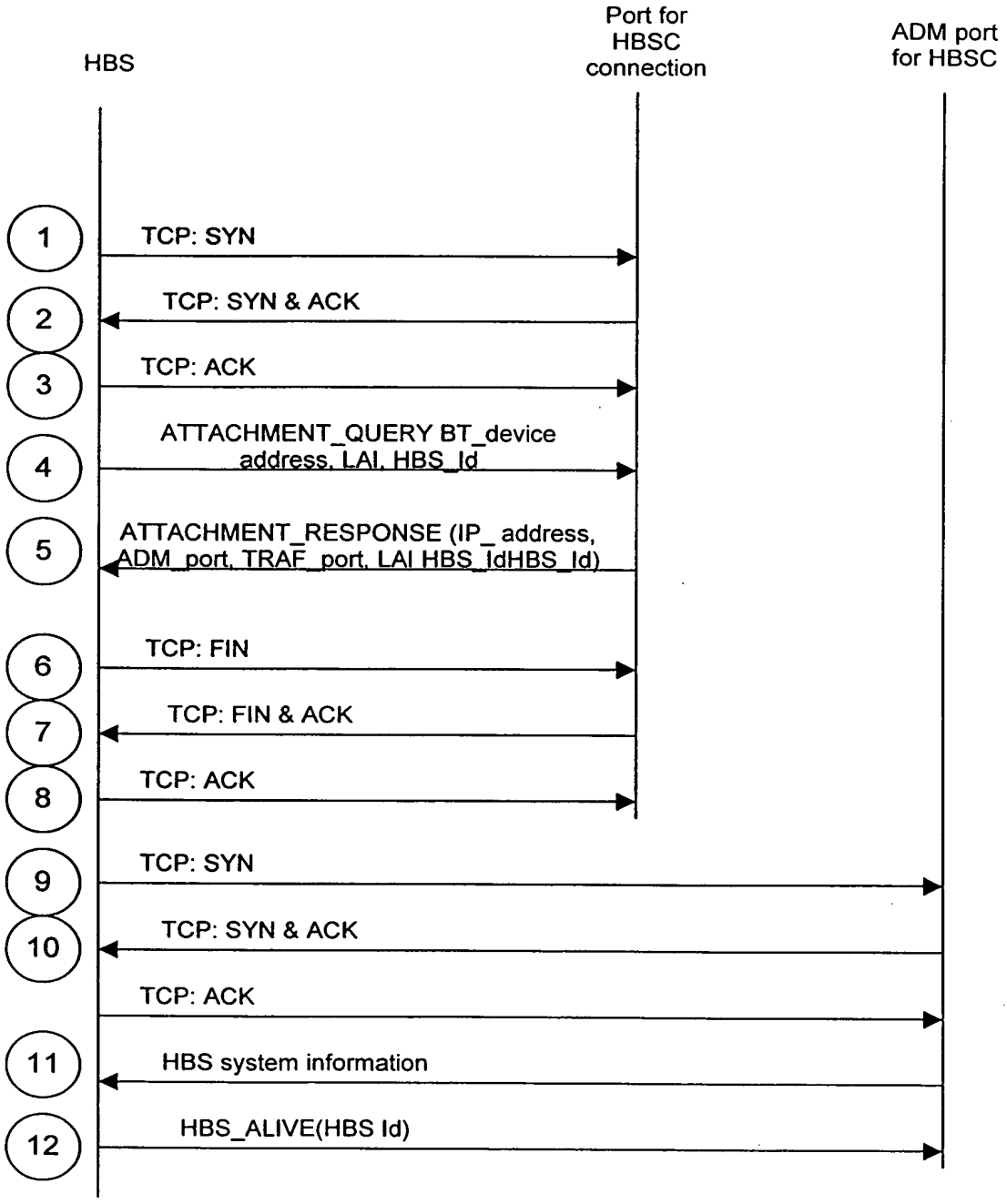
HBS
Port for HBSC connection
ADM port for HBSC
1
TCP: SYN
2
TCP: SYN & ACK
3
TCP: ACK
4
ATTACHMENT_QUERY BT_device address, LAI, HBS_Id
5
ATTACHMENT_RESPONSE (IP_ address, ADM_port, TRAF_port, LAI HBS_IdHBS_Id)
6
TCP: FIN
7
TCP: FIN & ACK
8
TCP: ACK
9
TCP: SYN
10
TCP: SYN & ACK
TCP: ACK
11
HBS system information
12
HBS_ALIVE(HBS Id)

Fig. 2

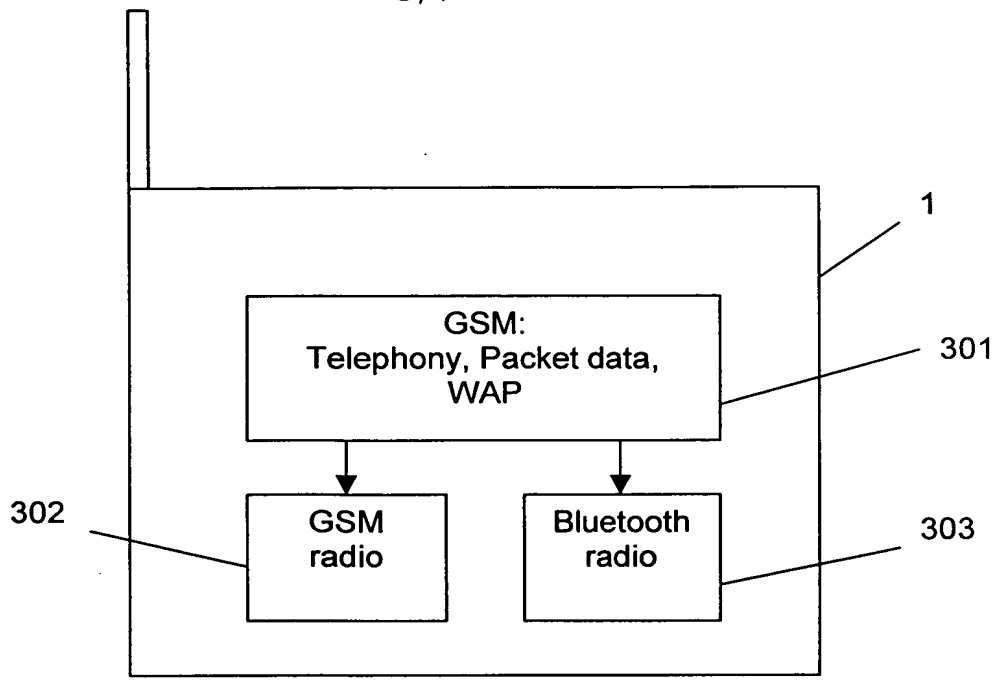

Fig. 3

$IMSI_1$	HBS_id_1
$IMSI_2$	HBS_id_2
⋮	
$IMSI_n$	HBS_id_n

1051

Fig. 7

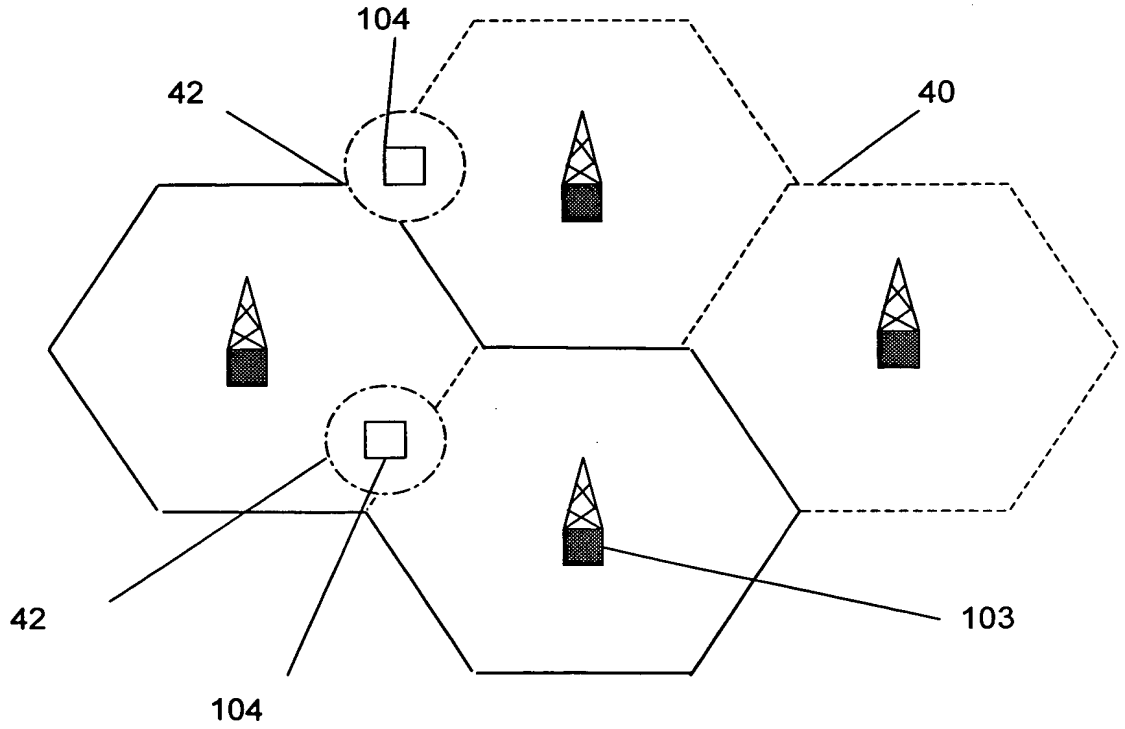

Fig. 6

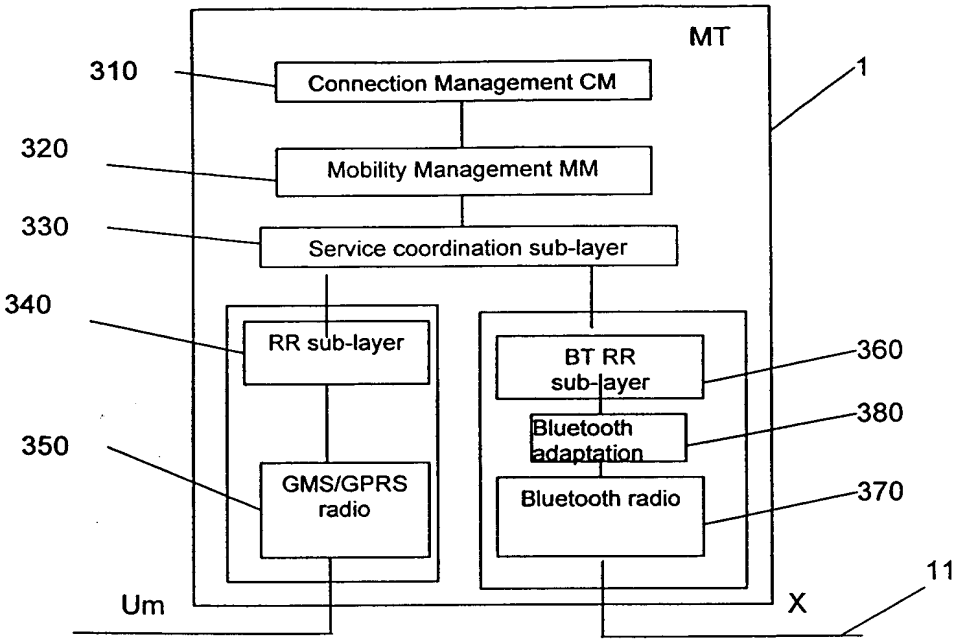
MT
310
Connection Management CM
1
320
Mobility Management MM
330
Service coordination sub-layer
340
RR sub-layer
BT RR sub-layer
360
380
Bluetooth adaptation
350
GMS/GPRS radio
Bluetooth radio
370
11
Um
X

Fig. 4

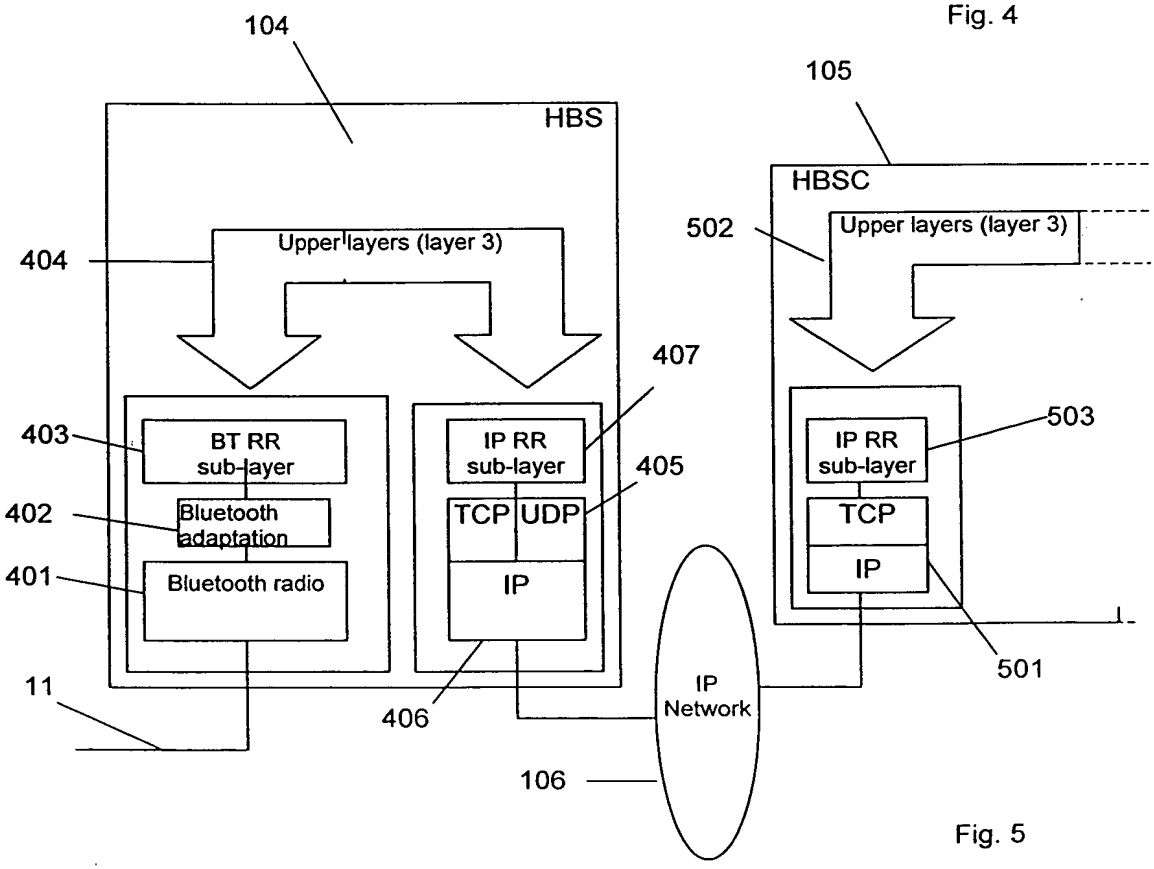
104
HBS
105
HBSC
502
Upper layers (layer 3)
404
Upper layers (layer 3)
407
403
BT RR sub-layer
IP RR sub-layer
503
405
402
Bluetooth adaptation
TCP
UDP
TCP
401
Bluetooth radio
IP
IP
IP Network
11
406
501
106

Fig. 5

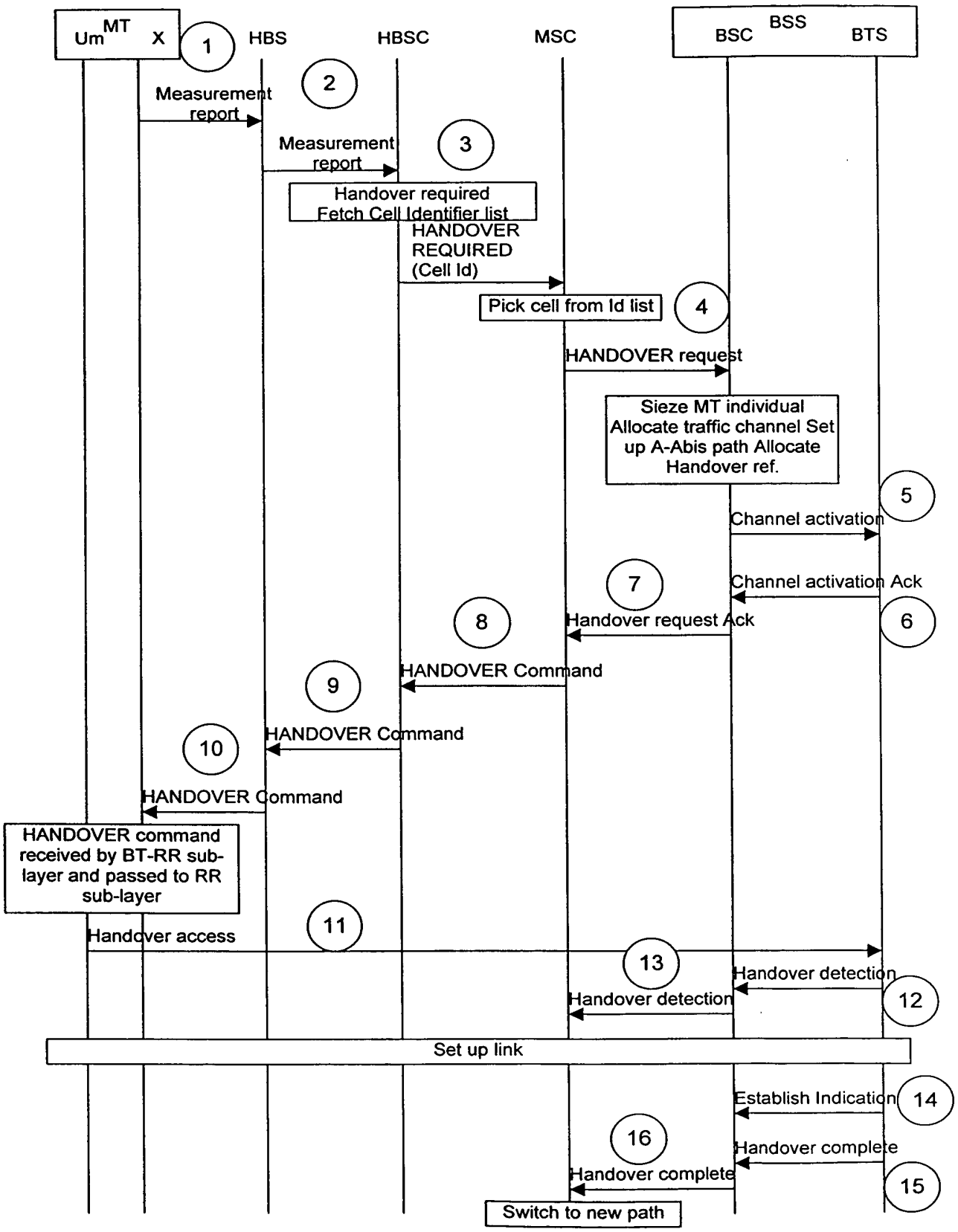
Um MT
X
1
HBS
HBSC
MSC
BSS
BSC
BTS
2
Measurement report
Measurement report
3
Handover required
Fetch Cell Identifier list
HANDOVER REQUIRED (Cell Id)
Pick cell from Id list
4
HANDOVER request
Sieze MT individual
Allocate traffic channel Set up A-Abis path Allocate Handover ref.
5
Channel activation
7
Channel activation Ack
8
Handover request Ack
6
9
HANDOVER Command
10
HANDOVER Command
HANDOVER Command
HANDOVER command received by BT-RR sub-layer and passed to RR sub-layer
11
Handover access
13
Handover detection
Handover detection
12
Set up link
Establish Indication
14
16
Handover complete
Handover complete
15
Switch to new path

Fig. 8

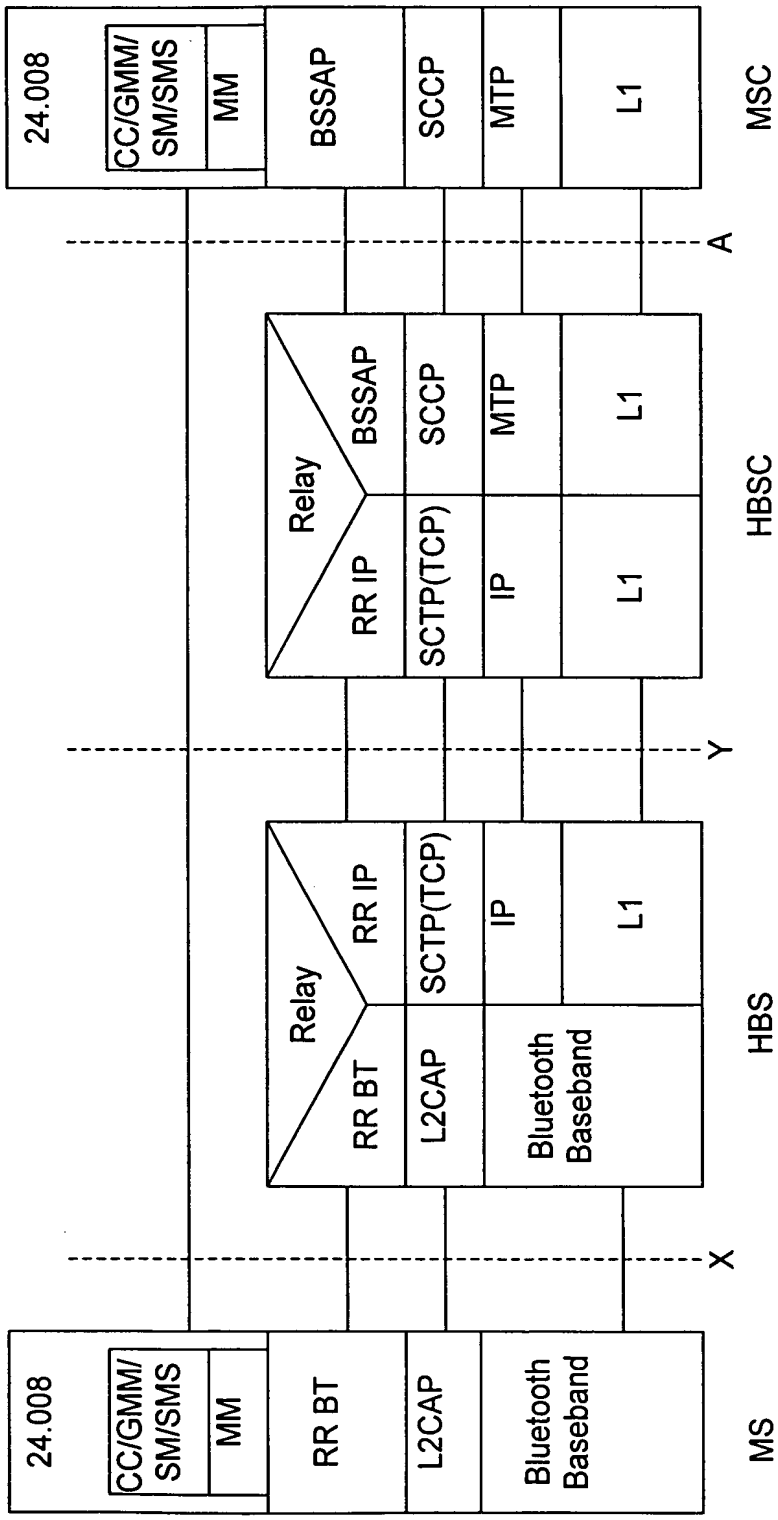
24.008
CC/GMM/ SM/SMS
MM
RR BT
L2CAP
Bluetooth Baseband
MS
X
Relay
RR BT
RR IP
L2CAP
SCTP(TCP)
IP
Bluetooth Baseband
L1
HBS
Y
Relay
RR IP
BSSAP
SCTP(TCP)
SCCP
IP
MTP
L1
HBSC
A
24.008
CC/GMM/ SM/SMS
MM
BSSAP
SCCP
MTP
L1
MSC

Fig. 9

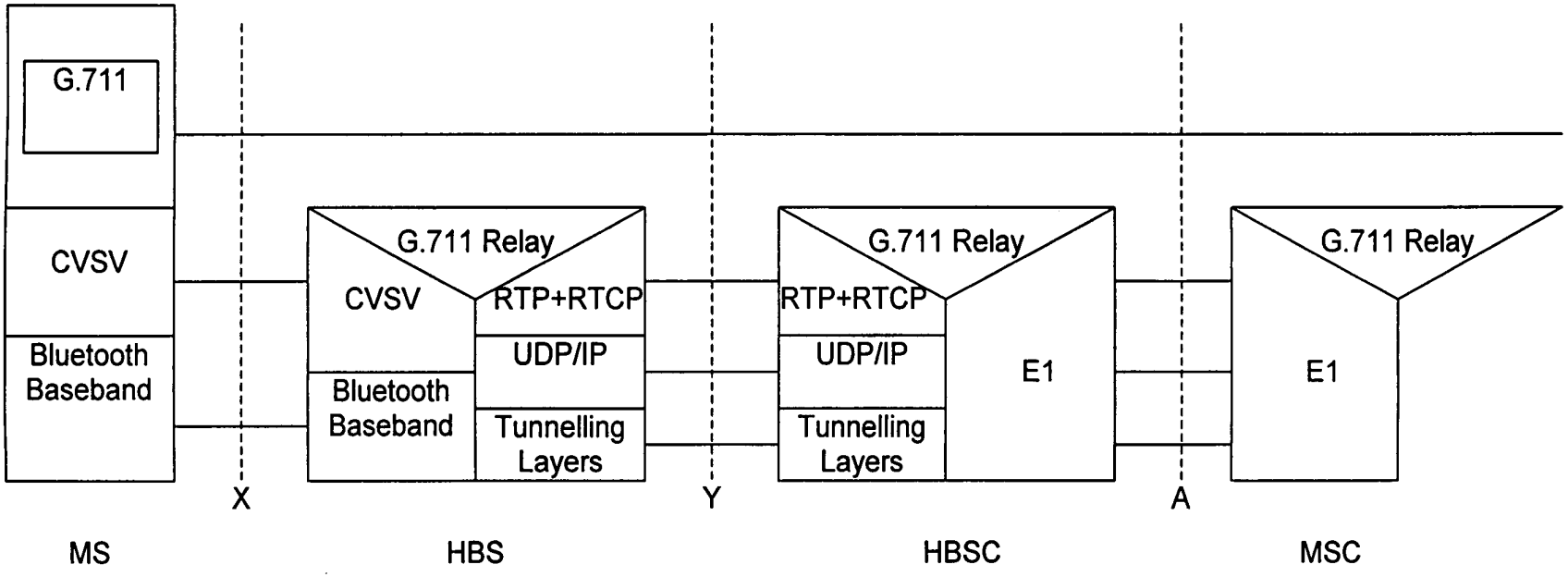
G.711
CVSV
Bluetooth Baseband
G.711 Relay
CVSV
RTP+RTCP
UDP/IP
Bluetooth Baseband
Tunnelling Layers
G.711 Relay
RTP+RTCP
UDP/IP
Tunnelling Layers
E1
G.711 Relay
E1
X
Y
A
MS
HBS
HBSC
MSC

Fig. 10